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The intent of this new journal is to further the cooperation of two major disciplines. In biology there have been significant breakthroughs, e. g. in molecular biology and chemical biodynamics. There is great progress in basic mathematics, computer technology, and numerical techniques, and an abundance of mathematical talent. The mutual understanding and collaboration between biologists and mathematicians is steadily increasing. New mathematical developments are applied in the life sciences. The complexity of biological phenomena in neurobiology, morphogenesis, chemical biodynamics, and genetics is a challenge to mathematics. The gap between the inherent complexity and the tools available is bridged by mathematical models, which are realistic as possible yet simple enough so that inferences can be drawn from them.

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